

**THE INFLUENCE OF PURCHASING STRATEGIES
ON MANUFACTURING PERFORMANCE WITH THE
MODERATING EFFECT OF PURCHASING
STRATEGIC INTEGRATION**

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ABSTRACT

The objective of this study is to examine the influence of Purchasing Strategies on Manufacturing Performance being moderated by the effect of Purchasing Strategic Integration. A total of 750 questionnaires been distributed via email to manufacturing firms located in major industrial states at Malaysia and resulted with 158 questionnaires or 21% been returned with complete information to be used for statistical analysis. The analysis result shows that all independent variables except Supply Base Management strategy when integrated with Purchasing Strategic Integration have significant influence on manufacturing performance. Thus, the analysis indicating that Purchasing Strategic Integration plays moderating role in creating stronger influence of Purchasing Strategies on Manufacturing Performance. Even though Purchasing only plays supporting role in manufacturing organization but its strategies creates significant contribution on manufacturing performance. Therefore, manufacturing firms should emphasize on focusing in purchasing strategies mainly effective negotiation, supplier relationship and interaction; and effective cost management as drivers for their excellence performance in this uncertainty market condition. This is essential for manufacturing firms in order to remain competitive and relevant in the challenging and competitive business environment.

ABSTRAK

Tujuan kajian ini adalah untuk mengkaji pengaruh strategik pembelian terhadap prestasi pembuatan dimoderasi oleh kesan strategik integrasi pembelian. Sejumlah 750 borang kaji selidik telah diedarkan melalui email kepada firma –firma pembuatan yang terletak di negeri-negeri sektor pembuatan utama dalam Malaysia dan hasilnya sebanyak 158 borang kaji selidik atau 21% dipulangkan dengan maklumat lengkap untuk digunakan dalam analisa statistik. Hasil kajian ini menunjukkan bahawa semua pembolehubah tidak bersandar kecuali strategik pengurusan dasar penjualan apabila diintegrasikan dengan strategik integrasi pembelian mempunyai pengaruh signifikasi terhadap prestasi pembuatan. Oleh itu, analisa ini menunjukkan strategik integrasi pembelian memainkan peranan moderasi dalam menghasilkan pengaruh yang kuat terhadap strategik pembelian kepada prestasi pembuatan. Walaupun pembelian hanya memainkan peranan sokongan dalam organisasi pembuatan tetapi strateginya menghasilkan sumbangan signifikasi terhadap prestasi pembuatan. Oleh itu, firma pembuatan patut mengutamakan perhatian terhadap strategik pembelian terutamanya keberkesanan perundingan, hubungan dan interaksi dengan penjual dan keberkesanan pengurusan kos sebagai pemandu untuk prestasi cemerlang dalam situasi pasaran yang tidak menentu. Ini adalah mustahak bagi firma pembuatan terus menyaingi dan berkaitan dalam cabaran dan persaingan perniagaan pasaran.

Chapter 1

INTRODUCTION

1.1 Introduction

This chapter begins with background of study to provide an overview of this research. Then, next section followed with problem statement that provides brief statement on the issue which the research determines to address. This chapter will continue with research objective and questions. Terminology section will explain the definition of key terms on most frequently used terminology in this research. Next, this chapter will flow to explain the significance of this study. Finally, the last section provides a brief summary on the contents from chapters 2 until 5 in this research.

1.2 Background of the study

In today's business environment, global competition has driven manufacturing firms to response to uncertainty more rapidly. Thus, emerging of world class competitors in domestic and international business creates need for organizations to revamp their processes in order to remain competitive. The fundamental goal of organizations corporate and functional level strategies is the development of sustainable competitive advantage (Hitt, Hoskisson & Ireland, 2007). Simultaneously, there is great deal of shifting in conventional way of thinking for business executives to eye on strategic purchasing as one of essential

elements for an organization's competitive weapon (Giunipero, Handfield & Eltantawy, 2006).

Purchasing has obtained popularity, is now seen as a key value adding function that is viewed as strategic to the firm's successful performance (Cousins, 2005). As a result, organization can no longer avoid the importance of purchasing function as every business is striving hard to reduce its cost of delivering most unique products and services to their customers and at meantime to protect the interest of stake holders on current uncertainty and volatile business environment (Monczka, Trend & Handfield, 2004). Many researchers on supply chain agreed commonly that new millennium competition will be focusing on firms efficient and effective supply chains (Carter & Ellram, 2003). Purchasing is prominent support activity in manufacturing process to create value through purchase of inputs, services and facilities needed to produce a firm's product.

Core competencies are key driver for firm's to remain competitive in current challenging market environment. Core competencies have been defined by Hitt *et al.* (2007) as capabilities that perform as a foundation of competitive advantage for a firm against its competitors. In this case, unlikely firm to achieve core competencies in all range of functionalities as some resources and capabilities of a firm might be incompetence compared to its rivalry (Mol, 2003). Furthermore, it will be costly and wastage of resources if a firm wants to focus in all range of functionalities that the firm engages. Identification of core competencies is essential to support firm's make or buy decision. Therefore, firm should outsource those functionalities or activities which they do not have competitive advantage (Ramsay, 2001). As a result, outsourcing creates direct link to purchasing management

whereby firm need to purchase those value creating activities or functionalities from an external supplier.

History proved purchasing progress in past 150 years which divided into seven golden period of purchasing function in organizations, from 1850's up to beginning of 21st century (Monczka *et al.*, 2004). The evolution begins with emerging of purchasing as a separate cooperate function, continue with development of basic purchasing procedures and ideas, recognition of purchasing function in determining sources of supply, sustaining purchasing role to reduce overall product cost, revive of material management as solution to material problem inclusive sourcing, followed by globalization era where its observed the development of supply chain management and its effect on purchasing structure and behavior (Monczka *et al.*, 2004).

Finally in new millennium, reshaping and revolutionary of purchasing and supply chain management (SCM) to face new era of challenges in global competition plays an important role for organizations (Monczka *et al.*, 2004). Thus, this creates paradigm of shift in the purchasing function through supply chain capabilities emerge as one of firms core competencies whereby it become a key element in organization to achieve manufacturing and business goals with development of sustainable competitive advantage (Das & Narasimhan, 2000). The tracking on evolution of purchasing revealed the way of purchasing function shift from traditionally clerical based function to a strategic focal point in an organization with more emphasize on exchanging information with top management concerning to attain best products and services through total cost, value and risk analyzing (Cousins, Lawson & Squire, 2006; Giunipero *et al.*, 2006).

Rajagopal and Bernard (1994) quoted Ammer (1974) comment that in 1970s' the era of industrial development, top management perceived purchasing as passive role in business organization. This later been rephrased by Rajagopal and Bernard (1994) as those who are ignoring and undervaluing purchasing strategy contribution on its corporate and product strategy been labeled as committing an error in the aspect of business management. As a result, world class purchasing organization has extremely shifted its goal from conventional way of doing business whereby purchasing function which merely viewed as the passive buyer of goods and services, now been recognized as an active and major contributor, vital for organization competitiveness (Cavinato, 1999).

Therefore, the role of purchasing not only limited in obtaining the right material, but also covering acquisition of product in the right quantities, with right delivery time and place, from the right source and at the right market place which been encompass as purchasing function. On average, manufacturing firms expend about 50% of their sales dollar in the purchase of raw materials, components, supplies (Janda & Seshadri, 2001) and services. This gives purchasing function tremendous potential to increase profits. Cost of purchase reduction has bigger impact in increasing the profit of an organization compare to other functional activities in an organization (Arnold & Chapman, 2004).

As a result, there are needs for purchasing function to cultivate strategies and plans in tag with organizational strategies of other business functions which provide supply market intelligence that contributes to strategic planning. Basically supply market intelligence translates the impact of trends base on market knowledge of supply and demand trend information which essential for organization strategies (Monczka *et al.*, 2004). This followed

by determining of critical materials and services necessity to support organization strategies in key performance functions. Another element will be focusing on developing supply alternatives and back up plans to ensure zero interruption to organization plans (Monczka *et al.*, 2004). Beside that, supply market intelligence also assists organization need for a distinct and world class competitive supply base (Monczka *et al.*, 2004).

Purchasing plays a strategic role in a firm's growth (Giunipero *et al.*, 2006) and success which enhanced shareholder value (Das & Narasimhan, 2000). As cited by Janda and Seshadri (2001) from Kiser (1976), purchasing strategies been divided into six areas which focus on negotiation, sourcing, developing and maintaining good relations with suppliers, developing suppliers, protecting the cost structure of the company and minimizing costs. Development of these elements in purchasing strategies creates path for manufacturing excellence performance through manufacturing priorities with key focus on quality, cost, delivery, and innovation (Das & Narasimhan, 2000). In addition to ensure the successful implementation and execution of purchasing strategies, it is important for manufacturing organization to hire purchasing professionals with high level of knowledge, abilities and skills which crucial to obtain organization goals and sustain its competitive advantage (Giunipero *et al.*, 2006).

The present study will inter-relate the contribution of purchasing strategies towards manufacturing performance. As highlighted by Brookshaw and Terziovski (1997); Carter and Narasimhan (1994) research that purchasing plays a prominent role in manufacturing performance which interfaced in quality improvement and followed by innovation in new product development. These components are part of manufacturing capabilities which plays

an important role on manufacturing performance. Furthermore, in later study by Das and Narasimhan (2000) also revealed that purchasing creates significant impact on manufacturing quality, delivery and cost beside research and development on new product introduction and unique customization.

1.3 Problem Statement

Recent development on world economic climate creates uncertainty on business environment. Some analysis predicting the world is just at a doorstep of worst global economic turmoil which we had gone through during the period after World War I. This been added with United States openly declared that they are facing recession and announced economic stimulation package of USD 819 billion by the approval from Senate (Economic Times, 2009). In addition, various economic stimulation package been declared by many countries around the world. Even, Malaysia come up with its first RM 7 billion economic stimulation package and followed by RM 60 billion package in March 2009 (New Straits Times, 2009). Similar action occurs in other countries as well such as China, European Union, Singapore and many others with their own stimulation packages to revive the economy. Thus, this creates a necessity for manufacturing firms to look into reconstruct, restructuring and enhance their strategy to sustain the business and profitability while remain competitive in marketplace. Manufacturing firms are in tremendous pressure to save their businesses while protecting the stake holder's interest.

After the collapse of world's major financial institution, latest alarming news was on US automotives manufacturing industry giants namely General Motors, Chrysler and Ford

called as 'Big Three' seeking USD 34 Billion financial bail out from The Congress (Economic Times, 2009). In addition, it is predicted there will be more firms in pipeline to come out with similar actions across the world whereby firm approach for government financial aids to bail out in order to sail through current challenging market condition. However, Malaysian base manufacturing firms are yet to face serious financial crisis as in other parts of the world. So far, the only reactive action been taken by manufacturing firms through reduction of their work force and since October 2008 until March 2009 around 19,325 been laid off in Malaysia (The Star, 2009) and nearly 5.1 million employees lost their jobs since early 2008 until March 2009 in US (Chris, 2009). Therefore, current crisis send signal to manufacturing firms on the precaution and early proactive measurements to save guard their firms from plunge into huge losses which eventually will lead to bagging up to government financial support or worst case winding up their business.

As a result, in order to remain competitive in current business environment will not be an easy path for business organization due to challenges needs to be face by organization with stiff competition and complexity in marketplace. Exploration on all possible avenues becomes vital for manufacturing firms to survive. Manufacturing firms realized cost management being fundamental element in order for them to remain profitable besides other elements such as superior quality, supply base development and innovative products. Manufacturing firms must focus to understand the element of their cost expenditure. In most of cases, manufacturing firms intend to emphasize more on their internal factor of cost element for sustaining and developing manufacturing performance.

This been observed through much attention given by researchers towards core process of manufacturing such as production control and process efficiency, and lean manufacturing outnumbered the research in support activity such as purchasing. Once, much attention been given in business downsizing whereby workforce elimination and job enlargement became norm in cost reduction activities. Later, this followed with process re-engineering by eliminating non value added activities which directly contribute to cycle time reduction. However, these actions had reached its limit as there is less room for improvement. Furthermore, most of the improvement is only possible with additional investment on Research and Development (R & D).

As highlighted in most of purchasing studies, in general firm's expense through purchasing contributes over 50 per cent of its cost for requisite products and services (Ferguson, Hartley, Turner, & Pierce, 1996; Spekman, Kamuff & Spear, 1999; Janda & Seshadri, 2001; Rodriguez, Hemsworth, Lorente & Clavel, 2006). This provides a clear guidance to manufacturing firms to focus on purchasing as a life line for sustaining the business. Furthermore, this involved very minimal investment as achievement relied on the skill of purchasing human resource. Unfortunately, most organization fails to recognize the importance and contribution of supply base management and purchasing which traditionally viewed as clerical stuff (Giunipero *et al.*, 2006). Therefore not much attention given in linking purchasing and cooperate strategy.

In order to overcome challenges in the context of sustaining and developing manufacturing performance, there are needs for organization to formulate and implement effective procurement strategies. As explain earlier, purchasing will contribute 50% reduction

on expense for every dollar saving. As such, focus on purchasing strategies will provide guideline to value creation path in manufacturing performance. Looking at purchasing as key component in organizations, the present study analyzes the importance of purchasing strategies contribution on manufacturing performance.

1.4 Research Objectives

The present study will investigate the contribution of purchasing strategies towards manufacturing performance with moderating effect of purchasing strategic integration. Thus, the study aims to fulfill the following objectives:

- i. To analyze the influence of purchasing strategies on manufacturing performance.
- ii. To analyze the moderating effect of purchasing strategic integration role between purchasing strategies and manufacturing performance.

1.5 Research Questions

In order to analyze the contribution of purchasing strategies towards manufacturing performance with moderating effect of purchasing strategic integration and how the elements of purchasing strategies such as cooperative negotiation, collaborative relationship and interaction, supply base management and cost management interrelated involvement towards manufacturing performance in term of capabilities such as quality, cost, cycle time, flexibility and innovation, the below research questions are addressed:

- i. Does purchasing strategies implementation create high level impact on manufacturing performance?

- ii. Does purchasing strategic integration create moderating effect on the relationship between purchasing strategies and manufacturing performance?

1.6 Significance of Study

There are some importance reasons to carry out with this study. First of all, this study is important as it will serve as a tool to analyze the impact of purchasing strategies implementation on manufacturing performance. Previous studies have proven that purchasing plays significant role on organization revenue due to the fact that organization spends more than 50 per cent of the cost for requisition of products and services (Ferguson, Hartley, Turner, & Pierce, 1996; Spekman, Kamuff & Spear, 1999; Janda & Seshadri, 2001; Rodriguez, Hemsworth, Lorente & Clavel, 2006). Most firms focusing on labor cost reduction and increasing sales as their strategy to increase firm's profit. However, firm ignored key prospect in the form of total supply chain management whereby without approach on world class suppliers will complicate the process to meet sophisticated customer demand (Killen & Kamauff, 1995; Monczka & Trent, 1992). Purchasing is viewed to deliver value by reducing cost of acquiring products or services in manufacturing firms which will directly improve the profit margin (Giunipero *et al.*, 2006). Thus, this study is timely to provide more valuable insights of the impact of purchasing strategies as core competency on manufacturing performance.

Purchasing function plays a significant role on business growth remarkably evident even in Malaysia's service industries. For instead, Malaysian Airlines System (MAS) in his Red Book with special focus on "Embracing Procurement as a Value Creation Lever".

Purchasing initiatives been identified as part of business turnaround plan for MAS. With the support of MAS top management Datuk Seri Idris Jala (MD) and Tengku Datuk Azmil (ED), whom had emphasize the needs to reassess the business and formulate innovative ways to advance purchasing practice in the organization. MAS has restructured and reinforce its procurement function by precisely combing expenditure in order to uncover cost saving opportunities. With this extraordinary measurement on purchasing, MAS achieved an outstanding financial record by declaring RM 610 million net profits for the first 9 months in 2007 and set a record breaking achievement marking its highest profit in its 60-year profit (The Putrajaya Committee on GLC High Performance (PGC), 2007).

Secondly, this study will provide guidelines to purchasing manager's on the way to identify and understand appropriate purchasing strategies which create greater impact on manufacturing performance. The result of this study will provide appropriate information as guidance to purchasing manager to identify purchasing strategies that creates greater value to manufacturing performance. Furthermore, this study will help purchasing manager's to analyze the gaps in purchasing strategies implementation to align organization strategy towards greater performance. Goh, Lau and Neo (1999) mentioned that oil crisis in 1973-1974 leads to other raw materials shortages withdrawn awareness to the importance of purchasing function as source of strategy to revamp the business sustainability plan. Thus, Goh *et al.*, (1999) highlighted that in period 1980's strategic importance of purchasing role reallocate into mainstream of corporate strategy through Porter five critical forces theory which emphasizes competitive nature and identification of buyer and supplier as two of five critical forces. Recent development on world economic and re-emergence of oil crisis which eventually leads to shortage of raw material due to some market players unable to sustain

their business and creates uncertainty in marketplace withdraw new wave of attention on purchasing. As a result, this study able to assist organization to allocate more resource and focus on purchasing strategies as major component in developing competitive advantage towards business sustainability and profitability.

Thirdly, this study will also present the effect of purchasing strategic integration role between purchasing strategies and manufacturing performance. This will be furnishing guideline to purchasing professional and top management on the purchasing strategic integration contribution on the relationship between purchasing strategies and manufacturing performance. As stressed by Giunipero *et al.* 2006, integration takes place in many ways through internal and external dimension. Thus, purchasing strategic integration moderator role examination will help to understand and explore effectiveness of this process to achieve manufacturing goals base on its competitive priorities. Therefore, it is not only importance for purchasing professionals to have good knowledge on the purchasing strategies but also the integration aspect with manufacturing strategic goals (Benito, 2007b).

1.7 Definition of Key Terms

For the purpose of this study, the following definition for some of the key terms that frequently used is referred to specifically to enhance understanding of the study:

- *Purchasing strategies:* This will be part of a level in strategy development called functional strategies define how purchasing going to contribute to desired business level strategy. This involved “process of planning, implementing, evaluating and controlling strategies and operating purchasing decisions for directing all activities

of purchasing function toward opportunities consistent with the firm's capabilities to achieve its long-term goals" (Carr & Smeltzer, 1997, p.201). There are four dimension of purchasing strategies been addressed in this study namely effective negotiation, collaborative relationship and integration, supply base management (Janda & Seshadri, 2001) and cost management. These four dimensions will be independent variable for this study as it significantly proven on the contribution towards purchasing effectiveness and efficiency.

- *Effective negotiation*: Refers to formal process of communication where two or more people come together to seek mutual agreement about issues. This process involves the management of time, information and power between individuals and organizations who are interdependent (Farrington & Waters, 1994). In addition, this process intends to create win win formula whereby about party satisfy and reach common agreement (Janda & Seshadri, 2001).
- *Collaborative relationship and interaction*: Two or more people reach high level of cooperation to maintain a trading relationship over the time. Basically, the relationship is bilateral as both parties have the power to shape its nature and future direction over the time (Monczka *et al.*, 2004). Collaborative relationship and interaction behavioral built up through trust, mutuality, information exchange, openness and communication (Mark, 2004).
- *Supply base management*: Refers to identification of the right number and mix of supplier that organization intends to engage. The process also required elimination of incompetence suppliers who are not able to achieve world class performance and replacing them with outperform potential supplier in market (Monczka *et al.*, 2004). In addition, supply base management consist of supplier selection

(sourcing strategy), supplier involvement and supplier development. This will be a continuous process.

- *Effective cost management*: Refers to identification of cost considerations beyond unit price, transport and tooling. This process considers various cost components which not only add value to product or service such as quality, technology, flexibility, service and cycle time (Giunipero *et al.*, 2006) but also emphasize on negative elements which increase the cost such as late delivery, poor quality and other forms of nonperformance of supplier (Ellram & Siferd, 1998). This will be key element as driving forces in global competition and determine purchasing decision on business awarding process.
- *Manufacturing Performance*: Refers to identification of the extent manufacturing firm able to utilize its resources to meet its competitive priorities goals through multiple achievement indicators (Leachman, Pegels & Shin, 2005). The dimensions of the manufacturing performance measurement through its competitive priorities encompasses cost, quality, cycle time, new product introduction, flexibility and customization responsiveness (Das & Narasimhan, 2000).
- *Purchasing Strategic Integration*: Refers to identification of incorporating or assembling together different functions, group of peoples or organizations with purchasing strategies to perform cooperation parallel in order to achieve common manufacturing related objectives (Monczka *et al.*, 2004). Purchasing strategic integration aligns and creates mutual understanding on purchasing strategies and manufacturing strategic plan (Benito, 2007a) in order to cultivate the synergy from upstream to downstream.

1.8 Organization of Remaining Chapters

This research been organized in current chapter as introduction. The rest of the thesis is structured as follow: The second chapter covers literature review on factors relating to this research. Theoretical issues and hypotheses which were developed based on the literature review are also presented in this study. Chapter 3 is analytical framework and research procedures which illustrate the data and variable used for study. Chapter 4 is finding and interpretation. This chapter presents tables with the entire data obtained showing finding on each question. Lastly, chapter 5 presents summary as part of discussion on the results. The findings of the research are discussed in context of its implication, limitation of the study, suggestion for future research and conclusion.

Chapter 2

LITERATURE REVIEW

2.1 Introduction

This chapter is structured to enhance the understanding of present research on purchasing strategies deployment and its impact on manufacturing performance. This chapter starts with focus on understanding four dimensions of purchasing strategies and followed by manufacturing performance measurement. Then, the concept of purchasing strategies has been linked towards its contribution on manufacturing performance with moderating effect of purchasing strategic integration. The final section discusses the hypotheses that are formulated to be evaluated in this research.

2.2 Theoretical Foundations

Recent study by Cousins *et al.* (2006) on taxonomy of purchasing function analyzed firm's performance base on different clusters in purchasing function which creates different level of relationship according to the categorization. Strategic planning, internal integration, status of purchasing functions and purchasing skills been used to measure firm's performance outcomes in term of supplier integration, supplier relationship outcomes, production and financial performance (Cousins *et al.*, 2006). Strategic planning measures firm's tactical approach on purchasing strategy via establishment of structural long term planning. This is done through re-examining of the strategic plan to bridge the gaps towards corporate strategy by incorporating the supply base development and supplier relationship. Cousins *et al.* (2006)

research revealed that all clusters grouped under strategic purchasing had significantly contributed towards higher level production performance except for celebrity purchasers.

In another study by Carter (2005) on purchasing social responsibility through mediating roles of organizational learning and supplier performance highlighted that purchasing leads to significant improvement of supplier performance and ultimately reduced costs as part of firm's performance. Carter (2005) research proved that relationship found between purchasing social responsibility and firm's performance with mediating effect of organizational learning and supplier performance in term of cost reduction. As presented by Giunipero and Pearcy (2000), transformation in purchasing function and business climate in the new millennium, guide firms to achieve the goals of an organization and rebrand purchasing function into world class purchasing. As world class purchasing, it is important for purchasing personal to acquire high standard of skill set in the area of negotiation, management, computer literacy and mathematical analysis which will lead to development and establishment of strategies for firm's excellent performance (Giunipero & Pearcy, 2000).

Goh, *et al.* (1999) noted that there is need for purchasing function to develop and progress in strategic posture whereby it needs to acquire new skills and obtain recognition from top management as core contributor in corporate strategy for superior business performance. It is crucial for firms to comprehend that purchasing must be proactive rather than reactive and functional at strategic level in order to obtain and retain sustainable competitive advantage. Supplier partnership viewed as prospect field to enhance business performance. Goh, *et al.* (1999) in their research cited Johnston and Lawrence (1991) statement that Ford's gains over General Motors in the 1980s viewed by many industry

observers as Ford's proactive actions to form strategic partnership with suppliers which General Motors failed to realize it on time. As a result, development of supply base management is key role of purchasing organization which required high level of analytical skills, creativity, expertise of supplier production and distribution process plus problem solving skills. Firm should stay focused on supplier selection process to ensure partnership relations only to those suppliers capable and willing to sustain commonly beneficial relationships (Goh, *et al.*, 1999).

Das and Narasimhan (2000) in their study about the relationship between purchasing competence and manufacturing performance discussed the role of purchasing practices on manufacturing competitive priorities. In their research, supply base optimization, buyer-supplier relationship development practices, supplier audit capability and purchasing integration been focused as four major components of purchasing practices in an organization to measure the competitive priorities consist of cost, quality, time, delivery and customer responsiveness elements.

The conceptual study by Rajagopal and Bernard (1994) on purchasing strategy revealed that it is impossible for firms to create, design, launch and produce feasible products throughout its life cycles by disregard the supply portion of material and its components. Thus, developments of strategies to identify optimum number of suppliers, development on type of relationship with suppliers, acquiring bargaining power and total cost management are key areas which need to be focus as drivers on improving the competitive position of firm (Giunipero & Percy, 2000).

Although the significant of strategic purchasing function been acknowledged, Benito (2007b) stressed that few research been done on purchasing function contribution on business performance. On the other hand Benito (2007b) also revealed that there is very limited analyzed done on the nature of purchasing capabilities and skills. The configuration of purchasing strategic and manufacturing performance is important but previous research more interested in linking macro level of purchasing function through supply chain management contribution towards business performance. Das and Narasimhan (2000), also supported that regardless of the significant contribution of purchasing competence, there are still huge portion of its function remain unexplored.

Therefore in another research, Benito (2007a) examined the purchasing strategic integration role as moderator to create effect on the relationship between purchasing efficacy and business performance. In his research, purchasing efficacy been outlined through purchasing strategic objective which encompasses its competitive priorities such as cost, quality, flexibility and delivery. Configuration of purchasing function with business strategy is crucial rather than focusing on the execution of particular purchasing practices. Thus, this study narrow down the focus of purchasing strategies influence towards manufacturing strategic goals with purchasing strategic integration role as moderator.

2.3 Purchasing Strategies

A framework is proposed base on an organization conceptual approach to follow in strategizing the purchasing function in addressing the manufacturing performance. Contract agreement, long term strategic factors correlate to core competences, benchmarking, supplier

partnership and interaction, value chain analysis as well as cost issues been framework as guideline for organization purchasing strategies. In addition, few other factors also been considered by manufacturing organization for strategic purchasing in order to drive and maintain the core competence of the firm. Some of these factors are such as delivery reliability, supplier finance stability and cash position, cost capability, technical capability been essential in firms buy decision which been translated in strategic position. In classic ways, firms base their procurement decision purely on cost issues have gone in the new strategic purchasing evolution. Those days purchase decision only focus on lowest cost position and neglecting the core hidden factors mainly on quality and delivery. However, firms are now aware and awake that some suppliers play around with cost elements just to close the deal at that particular point and there is no promising business continuity plan after a deal been closed.

Basically, purchasing in a manufacturing firms make available quality raw materials, spare parts for machine and factory maintenance as well offer services for use in production daily operation of its business. Development of manufacturing sector recognized the importance for firms to engage effective purchasing strategies. Thus, in order to strive through the competitive and dynamic business environment, purchasing strategies that focusing on formulating favorable business deal with suppliers through identification and development of competitive sources for high quality as well as low cost raw materials and spare parts plus excellent services is essential for world class manufacturing firms.

As a result, this study employs four element of purchasing element which been developed by Kiser (1976) and later been modified by Janda and Seshadri (2001). Kiser

(1976) study offer six purchasing strategies such as negotiation, developing and maintaining good relations with suppliers, sourcing, developing suppliers, protecting the cost structure of company and minimizing cost (Janda & Seshadri, 2001, p. 294). The present research adapted Kiser's model on purchasing strategies into four elements of purchasing strategies. Purchasing strategies in this study maintain effective negotiation and collaborative supplier relationships and interaction, while supply base management strategy subsumes the sourcing and developing suppliers in Kiser's purchasing strategy. The effective cost management includes Kiser's latter two strategies which is protecting the cost structure of company and minimizing cost.

2.3.1 Effective Negotiation Strategy

Basically, negotiation is a process involving two or more people of either equal or unequal power meeting to discuss shared or opposed interests in relation to a particular area of mutual concern. *"If you want to success in business...you have to learn how to negotiate"* quoted by Simon Hazeldine. As adopted from Porter's (1980) model by Mol (2003) bargaining power is the most apparent force associated to purchasing management. Firm's needs to find ways to compile resources to have more bargaining power with supplier as part of sustainable competitive advantage. Bargaining power with supplier been gained as part of negotiation skills in purchasing organization. According to Giunipero and Percy (2000), influencing and persuasion, understand business condition and customer focus are fundamental for negotiation process. Effective negotiation and communication able to foster good business relationship with supply chain partners.

Ramsay (2004), noted that negotiation process is crucial of managing differences in business relationships between buyers and suppliers in supply chains. Negotiation can be break down to two major approaches. One of the approaches is cooperative negotiation which emphasizes on win-win formula between both parties involve in negotiation process. This is genuine integrative bargaining whereby both parties assumes that all aspects of their interest been taken care well in order to maximize their cooperative value and benefit (Ramsay, 2004; Dion & Banting, 1988). Lax and Sebenius (1986) quoted cooperative negotiation approach also rebrand as value creates (Nauta & Sanders, 2000) or problem solving approach which creates trust and mutual understanding environment between both parties (Alexander, Schul & McCorkle, 1995). Another approach of negotiation called competitive negotiation which is genuine distributive and adverse towards common understanding. This approach focus on individual interest whereby each party attempt to maximize the self gain through aggressive cost competition tactics, enforce time pressure, lack of flexibility and threatening lost of business in order to gain advantage against the other party. Thus, Janda and Seshadri (2001), cited research conceptualization from Karrass (1974) and Perdue (1992) whom viewed this negotiation process as zero-sum win-lose game. In this case there is no room for cooperative.

As discussed by Janda and Seshadri (2001), cooperative negotiation cultivate win-win formula which able to increase supplier loyalty and improve supplier relations as all parties involved strongly believed, satisfied and agreed with mutual understanding and their common interest well protected. Dr Stephen Covey master of *The 7 Habits of Highly Effective People* quoted *“Win-win is a belief in the third alternative. It’s not your way or my way; it’s a better way, a higher way. Win-win is base on paradigm that there is plenty for everybody, that one person’s success is not achieved at the expense or exclusion of the success of others”*. It is

important that both parties investigate the goal of the deal and things need to be achieved through the intended deal in order to create effective negotiation. Effective negotiation should be able to create confidence to supplier that long term business opportunity is possible for them to undertake any capital investment (Ashcroft, 2004). However, this required high level integrity on both sides which enable accurate exchange of confidential information.

Negotiation is an ultimate value to implement the purchasing strategies that an organization developed. Negotiation will be used as a path to bridge the gaps between purchaser and supplier. It is important to have well developed negotiating strategy with tactics as a foundation to support that strategy. In cooperative negotiation, buyer-supplier negotiate creates win-win situation in order to decide the ways to divide and share the extended value pie (Monczka *et al.*, 2004). In this situation effective negotiation from buyer's point of view creates value when receiving better price than a competitor, assistance in developing new technology or product design, shorter lead time for ordering and delivering. In addition, both parties able work together to reduce waste and ultimately eliminate the hidden cost in long run. On the other hand, supplier creates value with additional volume, preferential and promising treatment for future business and lead to technical assistant from purchaser to reduce the operating cost. Eventually effective negotiation strategy should lead towards greater manufacturing competitive priorities.

2.3.2 Collaborative Relationship and Interaction Strategy

Building collaborative relationship with supplier is the key element in purchasing strategy. Supply chain relationship been explain by transaction cost theory, political economy

theory, social exchange theory and resource dependency theory which contributed to fundamental study for behavioral dimensions of supply chain relationship (Fynes, Voss, & Burca, 2005; Su, Song, Li & Dang, 2008; Carr & Pearson, 1999). Mark (2004) referred supporting element of buyer-supplier collaboration as cultural element which made of trust, mutuality, information exchange, openness and communication. There was empirical study done by Golicic and Mentzer (2006) on examination of relationship magnitude examined in detail how relationship magnitude in term of trust, commitment and dependence as independents variable contribute to relationship value. Relationship value had been identified as first step of quantifying measurement of relationship outcome.

Larson (1993) cited Pearson (1973) input on buyer supplier cooperation through teamwork, trust, unity, co-ordination and respect. Humphreys, Shiu and Chan (2001), also explained that collaborative relationships demand for trust and commitment for long term cooperation in addition to willingness to share risks. Commitment and trust been developed through effective communication (Lengnic-Hall, 1998). Meanwhile, Chandra and Kumar (2001) claimed that trust, commitment and collaboration were becoming more popular in supply chain relationships because of their ability to reduce uncertainty. Commitment from both supplier and buyer been exercised through committing resources to the relationship which exist through the expense, time and amenities of an organization (Zailani & Rajagopal, 2005). Whipple and Frankel (2000) examine the development of trust; respect and commitment are from openness and honesty. Development of mutual trust is the base for strong relationship. All issues related buyer-supplier need to be shared openly and honestly in order to gain their trust and commitment (Whipple & Frankel, 2000; Su *et al.*, 2008).